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EXTENSION SERVICE

REVIEW

U.S. DEPARTMENT OF AGRICULTURE * JUNE 1969

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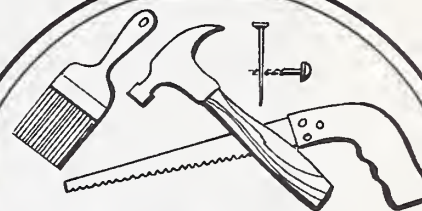


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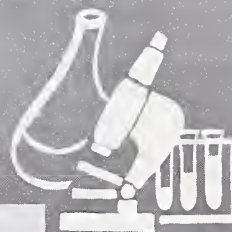
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EXTENSION WORK



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The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers the Extension worker, in his role of educational leader, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods, tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

CLIFFORD M. HARDIN
Secretary of Agriculture

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Federal Extension Service

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EXTENSION SERVICE

REVIEW

Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.

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Can we do a little more?

The first contact most Americans have with food and fiber products is at the retail store. Without a little help from those who know, how can they be expected to appreciate the importance of agriculture to our economy?

To develop such an understanding of the agricultural segment of our society would require a mammoth public relations job on the part of everybody involved in agriculture. But if we approached one segment of the public at a time, perhaps the job wouldn't seem so impossible.

This month's cover suggests one important audience—high school graduates. How many of them are aware of the myriad agricultural careers available to them?

Extension is involved in many activities to bring agricultural career possibilities to the forefront—4-H Career Exploration programs, special events on university campuses, news media campaigns on agricultural careers. The National Association of Agricultural County Agents gives awards for outstanding career guidance programs.

But perhaps we could be doing more, especially at the local level. We should be sure that high school counselors know about the opportunities for serving agriculture through such diverse disciplines as engineering, mechanics, home economics, food marketing, food inspection, forestry, veterinary medicine, biology, physical sciences, behavioral sciences, and computer science. And if a high school has no counselor, we should do something to get this information to the students.

It is a sad thing when a person discovers too late a career he would have enjoyed. Let's be sure that our young people know that there is a place for them in agriculture. —MAW

Apple ranch becomes a showroom

by

Ralph D. Smith

Extension

Communications Specialist

University of California

A farm can be a showroom to sell what the farmer is growing. So an outdoor showroom is what apple grower John Fisher is building on the slopes and terraces of the Glenbrook Apple Ranch along Highway 46 in San Luis Obispo County, California.

Fisher has 30 acres of new apple trees growing now and will have 50. With closely planted dwarfed trees, he is aiming for intensive production. His experiments with the help of Extension Farm Advisor Jack Foott are already pointing toward an expanding commercial apple industry in the area.

Along Fisher's white wooden fences are curving lines of dwarfed apple trees of as many varieties as Foott can find. And a whole orchard next to the road is planted to alternate blocks of Red and Golden Delicious. They're still too young to show more than samples of the apples to come. But they were planted with display in mind.

Those two varieties will be mainstays of Fisher's apple production. He has plans to start commercial shipments in another 3 or 4 years. But the other apple varieties, 150 of them so far, are drawing plenty of attention. They're a showcase for Fisher's roadside stand, and they're also an agricultural experiment to test the area's apple growing future.

"We hope to get up to 200 varieties eventually," Foott said. "With this

experimental work, we can establish the varieties that will do well in this area, and also the training methods and cultural methods that will work here."

In one new planting, in its first leaf this year, Fisher has nine different varieties, all intended to supply his roadside trade. The new orchard is expected to provide apples just off the tree for roadside sale from July through November.

The nine-variety orchard is on a fairly steep slope. But Fisher and the farm advisor laid out an orchard pattern that should control erosion. Perennial ryegrass grows between the rows, and weeds are controlled along the closely-planted rows by chemicals. An overhead sprinkler system irrigates the slope.

Since the orchard is an experimental grove, many of the apple varieties are largely strangers to California apple orchards.



Fisher takes a businessman-farmer's view of the project.

"In effect," he said, "we are establishing an industry in this community. It costs around \$3,000 an acre to bring an orchard like this into production. Trees are only a small part of it. Nearly all the investment goes into the local economy.

"If our experiments can increase the apple industry in the county, this will mean packing houses and shipping—eventually a couple of thousand persons hired annually. I'd like to see the industry here develop slowly and effectively.

"Through Jack, we've been able to draw on the experience of the whole Agricultural Extension Service, and the University of California's research people too.

"Personally, I feel that the apple industry in California has a long way to go, and we are going to help it along." □

Extension Advisor Jack Foott, left, and grower John Fisher inspect the first Golden Delicious apples to mature in a new orchard.

White board fences, white-trimmed red buildings, and apple trees of many varieties make a good showcase for the roadside apple sales of the Glenbrook Apple Ranch.





Healthier cotton, healthier profits

by
M. C. McDaniel
*Extension Plant Pathologist
University of Arkansas*

Arkansas cotton producers saved approximately \$14 million last year by using Extension-recommended disease control measures. Estimated losses from the major parasitic cotton diseases dropped from 19 percent in 1965-67 to 8 percent last year.

This significant decrease didn't just happen. It took a well planned educational effort to get producers to see a need and decide what to do about it.

Since a 19 percent annual loss meant a loss of about \$1,000 to the average Arkansas cotton farmer, Extension began in 1966 to place major emphasis on reducing these losses as quickly as possible.

The Extension educational program included workshops, farm clinics, agent training sessions, and large field evaluations.

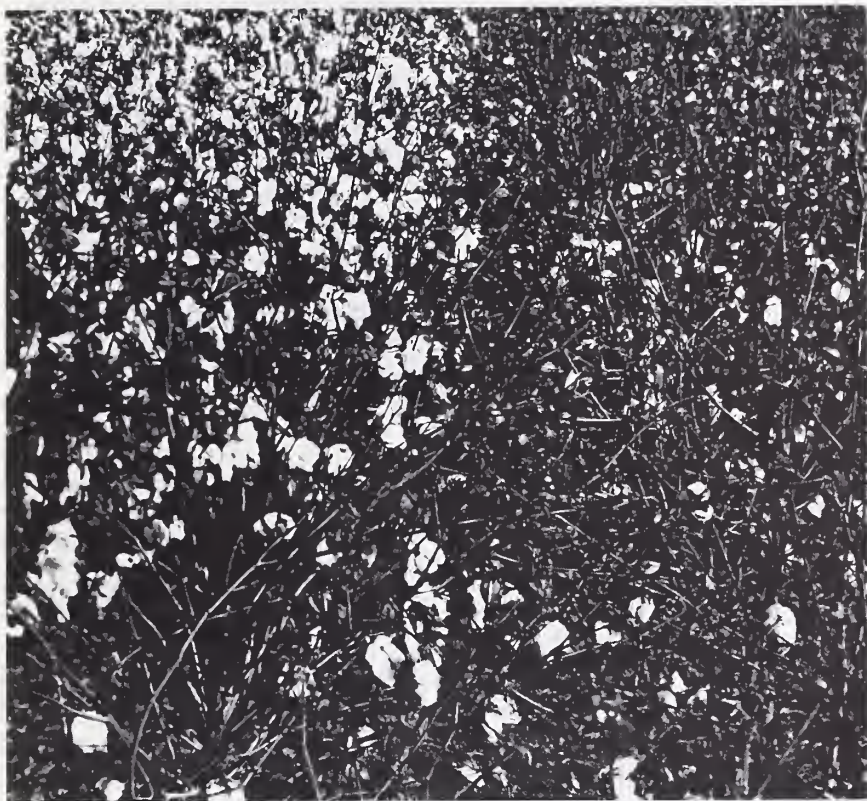
The first objective of the educational program was to create among the agents and the cotton farmers an awareness of the tremendous loss

from diseases. Information the agents received about diseases was included in the cotton production short courses they taught in most of the cotton producing counties in 1966-67.

Practically every type of mass media, including many television programs, was used to alert producers to the economic importance of cotton diseases. To create interest and encourage participation, dollar values were emphasized in discussing cotton diseases.

At farm clinics and cotton production meetings, emphasis was on the economic importance of cotton diseases and the possible ways of reducing them.

Unquestionably, all of these educational methods were worthwhile and were partially responsible for the program's success. Probably the most important single factor in bringing about the loss reduction, however, was the cooperation of several cotton farmers, Extension agents, and industry product development personnel.



In each of the three pictures, the plants on the left received in-the-furrow treatment; those on the right received seed treatment.

They gave the Extension plant pathologist excellent assistance in evaluating seed and soil fungicides on a field test basis. The evaluation determined the need for and effectiveness of the various methods of treatment. They involved the newer fungicides, particularly systemic fungicides used as seed, planter-box, in-the-furrow, and post treatment.

Seven of the field evaluations were conducted in five counties in 1966. After the results showed significant value in using a supplemental fungicide in addition to the conventional seed treatment, the evaluations were continued in 1967. Five evaluations were established in 1967, and some farmers tried the different methods themselves.

Weather and other complicating factors caused much seedling disease, thereby affording ideal conditions for measurements. The results in some instances were dramatic. One farmer conducted a demonstration in 1967

that resulted in 340 pounds more lint from in-the-furrow treatment than from seed treatment.

Four field observation or study days were planned cooperatively by Extension and industry. Attendance and interest were high—from 35 to 90 persons participated in the events. And the good news got around. The use of supplemental seed treatment fungicide in addition to the conventional mercurials increased from less than 1 percent to approximately 30 percent of the total acreage in the State last year.

The large scale adoption of these practices by producers no doubt deserves much of the credit in the disease loss reduction in 1968. The results from the field evaluations and farmer trials have brought about a revision in our fungicide recommendations in Arkansas. We feel that each of the types of treatment—seed, planter-box, in-the-furrow, and post—has a place in controlling cotton diseases.

Each grower will need to determine which type he will use, basing his decision on his previous history or experience in obtaining and maintaining a good uniform stand on his farm or perhaps on each field. It is also recommended that a supplemental fungicide be used in all cases where an incorporated herbicide is used.

The losses from *Fusarium* wilt were reduced considerably in 1968 by increased use of resistant varieties and crop rotations. Educational programs have been underway a number of years on the wilt diseases. Environmental conditions and certain cultural practices, especially skip-row planting, crop rotation, and better variety selection, reduced the usual significant loss from verticillium wilt and boll rot.

A total educational program on cotton disease control—with emphasis on seedling disease control—is being continued. The goal in future years is a reduction of the 8 percent loss we encountered in 1968. □

No-tillage production

requires 'unlearning'

by
S. H. Phillips
Crops Specialist
and
W. R. McClure
Agricultural Engineer
Kentucky Extension Service



Grain farming in Kentucky has changed dramatically in the past few years. This change, however, came neither easily nor overnight.

No-tillage row crop grain production, proved by research since 1960, appeared to be well adapted to Kentucky. This system involves planting row crops in sod or other crop residues without conventional soil preparation. It gives superior erosion control and improved soil moisture, reduces labor and equipment needs, and helps maintain good physical condition of the soil.

By using this method, it would be possible to crop about an additional 7 million acres of Class II and III land in Kentucky. Intensifying the use of just one land class would expand the row crop acreage over 50 percent or 2.7 million acres. The no-tillage system, UK College of Agriculture personnel felt, was the most logical direction to take if Kentucky was ever to fulfill its potential in grain production.

To increase row crop production and subsequent agricultural income, Extension specialists had to "sell" the idea to the farmers. At first, farmer adoption was limited. They had doubts about this revolutionary method, of course, but the real problem was that commercial planting equipment and herbicides to kill the sod and weeds were not available.

Extension then began a broader educational program to interest equipment manufacturers and agricultural

chemical companies in the no-tillage system.

When a manufacturer decided in 1966 to offer no-tillage planting equipment for the 1967 season, serious educational efforts with the farmers got underway. The University of Kentucky Cooperative Extension Service leased two no-tillage planters, and the combined mileage on the machines totaled well over 5,000 miles before the meetings and demonstrations were finished. Soil conservationists, vocational agriculture teachers, chemical company representatives, and equipment dealers all made valuable contributions to the program.

Farmers with no-tillage experience were used as discussion leaders in winter meetings. One Christian County farmer—Kentucky's pioneer in no-tillage grain production—shared his first-hand knowledge at meetings and field days in Kentucky and many other of the Southeastern States.

The area concept of Extension organization proved helpful in the field trial teaching plans. Under this system, an area grains specialist or agronomy agent is located in each of the State's 14 Extension areas.

These specialists assisted in setting up demonstration plantings in 48 of Kentucky's 120 counties, representing 12 Extension areas. Over 4,000 persons attended no-tillage meetings at plots. One demonstration in west Kentucky attracted 850 people.

Educational efforts often involved

"unlearning" established patterns. This was certainly the case in advocating no-tillage production. In relying completely on herbicides for sod and weed control, no-tillage is a total contradiction of traditional tillage technology. Thus, Extension specialists were faced with undoing previous educational endeavors.

Extension personnel also functioned as a liaison between the University of Kentucky researchers and chemical



and machinery companies so that a complete and workable program would be available to the farmer. Specialists integrated and simplified the research findings and recommendations from the several University of Kentucky departments and from the land-grant universities of Ohio, Virginia, and North Carolina.

As a result, three disciplines—agricultural engineering, weed control, and agronomy—were brought to-

gether into an easy-to-follow cropping system for the farmer.

But the educational program did not stop there. Agricultural engineers and agronomists continued to conduct applied research programs to answer producer problems. Date of planting, plant population, soil moisture comparisons, fertilizer and pesticide applications—times, types, and amounts—were all studied to give the farmer information on the best combination

of conditions for successful no-tillage grain production.

Field research plots served an additional function, too. They were used as teaching laboratories for industry technical and sales staff and agency personnel.

In addition to plot demonstrations and field days, an Extension publication was developed and distributed throughout Kentucky and some surrounding States, news articles were released through mass media, and slide sets with taped narratives were employed in meetings.

Kentucky's no-tillage program has even international interest, for special assistance was given to three foreign countries. Farmers from Australia and Argentina viewed no-tillage fields and discussed production methods.

The program has enjoyed remarkable success. Prior to 1966, less than one acre was in no-tillage row crops in Kentucky. In 1968, this method was being used on 80,000 to 100,000 acres.

A second phase of this grain cropping system is also increasing in popularity. Aerial seeding of small grain into corn or soybeans offers new opportunities for expanded grain production. In 1968, 30,000 acres of wheat and barley were aerial seeded in a double cropping with soybeans.

Both no-tillage and aerial seeding are expected to grow in 1969 and present new opportunities and sources of income for Kentucky farmers. □



J. R. Davie, area Extension agent, left, and J. T. Williams, area agronomist, center, consult with one of the first no-tillage producers.

Field tours of no-tillage production attracted thousands of farmers.



Sex education — can Extension help?

by
Jim Bray
*Extension Youth Agent
University of Missouri*

Does Extension have a responsibility to teach sex education? You may have formed an immediate opinion on this question—the subject is sensitive and there are many interpretations of sex education.

An anxious father visited our office about a year ago to discuss some problems he was facing in raising his boys. One of the problems troubling him most was that of teaching his boys the “facts of life.” He didn’t feel that he knew enough to give his sons the right information.

As our discussion continued, he said, “Why don’t you set up some classes in sex education for parents?” I could think of no reason why we shouldn’t.

Extension has long been concerned about the growth and development of the small child, pre-adolescent, and adolescent. We have spent countless hours in family life education. Through our youth organizations, we constantly strive to develop future adults with high moral standards.

Therefore, I told this father that

I would try to develop a program in sex education.

To get the program started, we consulted many people, especially those in leadership positions such as ministers, teachers, school administrators, school counselors, and doctors. We enlisted the help of those who were favorably inclined. They assisted with promotion, served as resource people, provided refreshments, etc.

With the help of this group, a set of guidelines and goals were developed. We felt that the course should:

- deal with the total process of growing up.
- not replace parent responsibility.
- be frank and factual.
- aid in developing communication between parent and child.

Our goals were:

- To establish a point for future talks, since most parents do not know how much their children know about sexual development.
- To provide parents with enough

information for them to feel confident in discussing sexual development with their children.

—To reduce parents’ embarrassment by having sexual growth discussed openly in class.

We “sold” the program with two basic premises. First, the basic purpose of the course was to improve communication between parents and child. Second, the classes would help parents perform their responsibility of discussing sexual growth with their children.

To stay within the guidelines and also reach our goals, parents and children attended together. Fathers and their sixth, seventh, and eighth grade sons attended one series of classes, while mothers and their sixth, seventh, and eighth grade daughters attended another series. If a child did not have a parent of the same sex living at home, another adult, such as a relative or a 4-H or scout leader, could attend with the child.

Both boys and girls received the same information. We would have preferred that everyone attend together; however, it was expected that adults would respond more freely if only one sex was present.

The course, “Family Relations in Sex Education,” developed into four sessions.

In the first session, we dealt with “Understanding the Meaning of Sex Education.” During this period, we attempted to get the class to recognize that sex education is much broader

than reproduction—that it is actually the process of becoming a man or a woman. The film “Parent to Child About Sex” was used as an aid.

The second session, “How and Why We Grow,” concentrated on the social, emotional, and physical changes that occur during puberty. The films “Boy to Man” and “Girl to Woman” were used. Both films were shown to each group.

I did the instructing; however, a medical doctor answered questions concerning physical changes.

“Children Will Become Parents” was the topic of the third session. With the assistance of the film “Human Reproduction” the social, emotional, and physical aspects of human reproduction were discussed.

A doctor also assisted in this class to answer questions concerning the physical aspects of human reproduction.

In the last session, a panel of ministers assisted with a discussion of “Social and Moral Attitudes in Sexual Growth.” This discussion centered on what is moral, and how to develop good moral character in children.

To provide additional resource material for the home, we gave parents copies of several booklets about growth and development. Such booklets can be purchased from the American Medical Association. Films can be obtained through State Universities or State Departments of Health.

We learned several things in that

first course which aided us greatly in succeeding courses.

—Most parents are honest in the opinion that they do not know enough to discuss sexual growth with their children. One mother of 12 told me, “I learned more about my own emotional and physical development than I have ever known before. Now I should be able to help my children.”

—Some adults, especially men, are very hesitant to show any lack of knowledge about sexual development. Because of this attitude, educational techniques in the first two sessions involved the group without forcing them to admit a lack of knowledge.

During the first session, the class was broken into small groups composed of both adults and children to discuss “What should be included in a discussion of sex education?” Following these group discussions the instructor led the class in a discussion of the topic. Not surprisingly, the children brought out the points discussed in the small groups.

In the second session, the above procedure was followed using the discussion topic “How did I learn about the physical and emotional changes that occurred at puberty?” During this class discussion there was more adult participation. At no point were the adults forced to participate. In the third and fourth sessions, most of the hesitation and embarrassment were gone and questions became an important part of the class.

—Just being a doctor or minister

does not qualify a person to assist with this type of class. These resource people must be realistic and must understand the extremely wide range of attitudes in people. We also tried to find resource people who could talk to both adults and children. The resource people must talk to the class without using scientific technical terms or speaking in platitudes.

—One of the major problems of communication between parent and child is terminology. Adults use one set of terms and children use another, neither of which may be correct. We tried to give them a common correct terminology. Most parents say that it is much easier to talk to their children now that they speak the same language.

—Parents who pay some small fee, \$1 to \$5, get a great deal more out of the course than do those who pay nothing. Parents in a course paid for by a PTA were not as responsive as others had been. The fee covers the cost of the educational materials used in the course.

Since we started conducting these courses, more than 350 parents have enrolled. Several other counties in Missouri are now offering similar short courses.

In answer to the initial question: Missouri’s experience has shown that Extension *should* be involved in teaching sex education, as long as we teach about the total process of becoming a mature man or woman. □



Three of the men attending the meeting in Lucas County practice the tips they received on accurate casting.

by

Robert E. Kowalski
Assistant Extension Editor
Iowa State University

Many farmers in Iowa have ponds on their land that are stocked with fish. In addition to providing pleasure, these ponds cause many problems. And some owners don't know how to enjoy their ponds to the fullest by fishing. Last summer Dr. Robert B. Moorman decided to do something about the situation.

The Extension wildlife biologist at Iowa State University planned a series of meetings in the 11 Iowa counties that make up the Tenco area. He contacted the area leaders in crop production. They told the individual county Extension directors, who in turn set up the meetings. The county Extension directors arranged with local pond owners to have the meetings at the pond sites.

A total of 465 persons, mostly farmers and their wives, attended the programs, and were extremely receptive to the information they gained.

Moorman obtained a number of fishing rods and reels of all descriptions—spinning, casting, spin-casting, and fly—from Michigan State University. He used these to demonstrate the many ways to enjoy fishing, and those attending the meetings were then allowed to practice with the equipment.

Conservation officers were present at most of the meetings, and sometimes demonstrated the equipment

Education for enjoyment

while Moorman spoke about some aspects of farm pond management. The officers were also able to discuss game laws, and in some cases they showed the people some of their own tackle and told them how to use it to catch more fish.

Moorman said the primary interest of most farmers was in algae and water weed control. Many wanted to know how to keep muskrats out, how to catch channel catfish and the big bass, and why their bluegills were always so stunted.

There is a great need in Iowa ponds to harvest much of the bluegill population in order to keep up the balance in the pond. To do this, Moorman said, you need small hooks and some leisure time to pull the little ones out.

By using the things they learned, the farmers who attended the meetings will be able to enjoy their ponds more completely. And in this world of hard work, a little pleasure is a big thing. □

Dr. Robert Moorman talks to pond owners about fish pond management.





Marshall County legislators John Carrigan and Robert Polen (on phones) at the Statehouse field questions from their constituents at telelecture stations back home. At left, waiting for questions, are Roy Rogerson, Marshall County delegate, and Senator Ted Bowers from neighboring Wetzel County.

Telelectures — an effective link between citizens, legislature

by
Joseph L. Fasching
*State Extension Editor—News
West Virginia University
Appalachian Center*

Two West Virginia county Extension agents recently introduced a communications "first" to West Virginia, bringing State government closer to the people and generating greater local interest in public affairs.

D. A. Hutchison, Marshall County Extension agent, and Mrs. Jane Jones, Wood County Extension home economist, used telelectures for direct communication between county legislators at the State capitol and citizens who assembled in local high school auditoriums.

The citizens received first-hand reports on legislation affecting their counties and gave their reactions or asked questions. The issues discussed included "Income Taxes," "Education in West Virginia," "Air

Pollution," and "Financing State Government."

Hutchison held a series of six weekly evening programs. A three-way hookup allowed simultaneous participation by groups at high schools at Moundsville and Cameron, 20 miles apart.

Mrs. Jones arranged a one-session experimental program as a training project for leaders in Wood County Homemaker Clubs and other interested people.

Telelecture communication, basically, is amplifying the sound of voices in a telephone conversation. With transmitting and receiving facilities at each station on the hookup, question and answer periods become an important part of the process.

Hutchison also usually used two sets of slides, or slides plus transparencies for an overhead projector. The speaker's picture was projected on one screen during his 10-minute presentation while a second set of

visuals related to his subject was projected on a second screen.

Hutchison's series also featured discussions by public figures in other areas. Dr. Louis Bell, WVU economics professor and special advisor to the legislature, presented a talk on taxes. Professor Benjamin Linsky, a prominent national consultant on air pollution, spoke to the group after legislation on that subject had been introduced.

The State legislators and citizens were pleased with the telelecture series.

Jay Rockefeller, West Virginia Secretary of State, who addressed one of the telelecture sessions, wrote: "I want to thank you for your part in setting up the system. Somehow, we are never going to get the people of this State in on the legislative process and its importance until they have a greater awareness of, and sensitivity to, some of the important issues. . . . These telelectures are one very significant way to change this communication gap."

John Carrigan, minority leader of the State House of Delegates, commented: "Very little is known in this area about what goes on in government in Charleston; this is the first time I have had the opportunity to explain to the people what we are doing there."

Citizens wrote: "This direct approach in hearing and questioning our legislators is important if we are to be able to judge them correctly."

"The average voter never talks to the man he has helped put in office, and this was a rare opportunity."

Telelectures also have been used effectively to conduct income tax short courses for farmers throughout the State. Dr. B. L. Coffindaffer, Dean of the WVU Appalachian Center and Director of the Cooperative Extension Service, said, "The Center is finding new uses for this type of communication. It provides an efficient means of using personnel and material resources in bringing the University to the people." □

'Ask Kathy'

an experiment in nutrition education



Naming the program "Ask Kathy" gave it a personal touch and helped encourage shoppers to stop and talk.

The home economist was surprised at the number of men food shoppers, many of whom said they do all the shopping for their families.

The nutrition of many limited income families is inadequate because they do not understand nutritional needs, are not competent food buyers, and have limited knowledge in the principles of food preparation.

Because these are not the people who normally attend Extension classes, the Wayne County, Michigan, Extension home economists decided to go where they are—to the supermarkets.

Their plan was to set up information booths in food stores in several of the most depressed areas of Detroit. To get the ball rolling, Extension contacted the manager of the Food Industry Council of the Greater Detroit Board of Commerce. Enthusiastic about the idea, he arranged with one food chain to use seven of their markets throughout the county, most in Detroit's inner city.

The home economists worked with the food chain's advertising agency



by

Kathleen R. Bufton
Extension Home Economist
Wayne County, Michigan

to set up the mechanics of the test program. To personalize the project in the minds of the shoppers, they called it "Ask Kathy."

During the 6-week test period, the home economist who manned the information booth encountered many problems—both with store management and with customers—but learned much about the value of such a program.

The attitude of the management, she found, is directly reflected in the

attitude of the customers and the atmosphere of the supermarket. Where the manager was friendly and kept a clean, well managed store, the customers were friendly and anxious to ask questions. Where the attitude of the manager was less than desirable, the customers were suspicious of the home economist and suspected a gimmick.

The locations of the stores did not seem to be a factor in the responsiveness of the customers. The friendliest people lived and shopped in an area that has been identified as one of the most hostile and dangerous areas in Detroit.

Although a great number of people did not know what Extension is and how they could make use of its services, they were enthusiastic when they learned that they could come to Extension for help.

Consumers living in the depressed areas of the city do want information on nutrition, food preparation, and child care, and they will use it when they know it is available. Several people came to the stores specifically to talk to the home economist. Because of a newspaper article about the program, several men brought lists of questions from their wives. One woman wrote to the home economist in care of the supermarket.

People have more time in the mornings and will stop to talk longer than those in the afternoon. Contrary to the usual reports about "impulse shopping," about 90 percent of the people shopped with a list.

Particularly on Thursdays and Fridays, the number of men shoppers equaled or exceeded the number of women shoppers. Many elderly men said they did all the shopping.

Some women shoppers were reluctant to give credence to the home economist because of her apparent youth. They hesitated to ask questions until they found out that she had been married for 19 years and had four children. One shopper said, "I don't give no mind to just book learning—takes experience too."

The kinds of information most wanted were:

—Low-cost recipes,

—Interpretation of can sizes and information on package labels,

—Nutritional needs of children, and

—Information on buying, preparing, and storing protein foods.

Bulletins containing recipes along with educational information were the most popular. Teenage girls requested low-cost, simple to prepare dessert recipes.

Much of the success of such a program depends on the ability of the home economist to be approachable. If she did not speak first, very few people stopped; when she did speak first, even those who appeared to be the most hostile would smile and stop to talk.

This program demonstrated to the Wayne County home economists that there is a need and a place for home economists in supermarkets to give assistance and information to consumers. They believe, however, that these home economists should be provided by the store or a food council in the future, with Extension home economists acting as resource people.

Because of the positive public response to the experimental Wayne County Extension program, the food chain with which the home economists worked has begun implementing its own consumer information program and plans to hire several home economists.

The chain has also initiated the formation of neighborhood "block clubs" for food stamp users. The clubs will have monthly educational programs on nutrition, with the food chain bearing the costs beyond those which can be provided by the agencies serving the area.

Such an approach should more than pay off in benefits to family health as well as increased business for the stores as a result of their demonstration of concern for the well-being of the community. □



Homemakers' requests for recipes could often be met from the good supply of USDA bulletins on hand at the booth.



Missouri's Green Hills area, site of the State's first benchmark study.

Missouri area experiments with benchmark studies

Measuring Extension progress

by
John G. Gross
Extension Studies Specialist
University of Missouri

To measure progress, you must have a starting point. To evaluate a change in an Extension program, you need a bench mark which will let you compare the "before" and "after".

This can be simple if progress can be measured in terms such as dollars or bushels. But the problem is much more difficult when you are dealing with attitudes and educational programs.

For example, consider the many changes being made in Extension from county staffing to area and subject

specialization. How do you evaluate these changes? Do the administrators and agents ask themselves what they think about it? Do they ask their clientele? What should they ask? How should they ask it?

Missouri has begun attacking this evaluation problem with bench mark studies. An initial study of clientele opinions and attitudes was made in the nine-county Green Hills area in late 1968 just before an area agent specialization plan was implemented. Another study in 3 years will measure changes in attitudes and opinions resulting from the area specialization.

Under the new plan, each of the 26 Extension workers in the area will work on an area basis, with many serving all nine counties. Previously, only eight of the 26 agents worked in more than one county. Only one of these positions covered all nine counties, and the rest involved only two.

The district director and county directors in the area felt that the staff realignment should be evaluated. A conference was called with the State Extension studies specialist to develop an evaluation plan.

Questions to be answered by the study were:

—What are the characteristics of people who use Extension?

—What is their attitude toward Extension?

—How satisfied are they with Extension?

A bench mark study was chosen as the best approach. This data could then be used to measure the effect of the agent specialization plan. Since the changes were to be announced and put into effect soon, the information was collected by mailed questionnaires.

The questionnaire went to a stratified random sample, using the current Extension mailing lists as sources for names. Approximately 40 names were selected per agent position for each county. In addition, all members of the county Extension Council were included.

Mailing lists were sampled by taking names at intervals to give the required number. Attempts were made to include names from all mailing lists in the sample and yet have them reflect the relative importance of programs—agriculture, home economics, livestock, agronomy, home management, continuing education for women, etc. The sample included 1,104 names after the elimination of duplicates (some names were on more than one mailing list from a county).

It was important to keep the questionnaire short, but the information collected needed to be of sufficient reliability and validity to be useful.

First, questions on characteristics included such items as age, level of education, sex, occupation, and location of home (urban, farm, rural non-farm). We also asked for the type of contacts they had with Extension.

Respondents were asked their overall impression of whether the county Extension program met the educational needs of the people in the county. Rankings were: very good,

all important needs are met; some needs are met, some are not; meets some needs but many are not met; many needs of people are not met by Extension program.

Also, they were asked to rate their familiarity with the Extension program on a 5-point scale. Attitudes toward Extension and the agent specialization plan were assessed by asking, again on a 5-point scale, whether they agreed or disagreed with eight items related to the subject.

Items pertained to such things as Extension efficiency, ease of contact, feelings about specialization, and quality of information. Scoring of these statements was related to favorableness toward Extension.

One question was asked about feelings towards agent specialization. A companion question was, "How do your friends and neighbors feel about specialization of the Extension staff?" Quite often, people respond to questions as they feel they are expected to respond. They frequently are more inclined to reveal their true feelings

when asked how other people feel. This projective technique can help discover whether some bias exists in the responses.

The satisfaction of people with Extension programs was assessed by asking for each of 10 selected Extension programs: "Are you active in the program at the present time? If yes, how satisfied are you with this program at the present time?" Five choices followed, ranging from very satisfied to very dissatisfied.

The 10 program areas investigated were: family living (home economics), balanced farming, farm management, agronomy (soils and crop production), 4-H and youth development, community development, livestock production, dairy production, continuing education for women, and continuing education for professionals.

Results of the study are being analyzed. They should be of immediate use to Extension staff in program planning, and should provide a benchmark for later comparison. □

Planning for the Green Hills study are Wayne Atkins, district director; John Gross, Extension studies specialist; and county Extension directors Raymond Smith, Don Rains, Lelan Ryan, Hubert Headrick, Don Henderson, and Ryland Miller.



Expanding Extension nutrition programs

Late last year Extension received a special allocation of \$10 million to expand its work in food and nutrition education. These funds were to finance the expansion during the last half of the current fiscal year. In view of the fact that nutrition education is one of the oldest Extension home economics programs, what is special about this?

The expansion is special for several reasons. First, emphasis of the expansion is being directed to the hard-to-reach low-income families. It is special because this is the first time Section 32 funds have been used to finance educational work in nutrition. It's special because the funds can be used only to hire, train, equip, and support non-professional aides—not to pay the costs of professional support and supervision for the effort. The aides are to work on a person-to-person basis with the individuals who do the food shopping and prepare the meals in the target families.

The goals of the expansion for the initial allocation called for employing more than 5,000 aides and reaching nearly 200,000 low-income families by July 1, 1969. At the half-way point, the expansion seemed to be on or ahead of schedule.

A preliminary summary of reports from 39 States giving progress up to March 31 showed the following: 3,600 aides had completed initial training and more than 400 were in initial training at that point; more than 54,000 families containing 261,000 persons were in the program; and contact had been established with 36,000 more

families. The program is underway in all 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. It is being conducted in 672 counties and independent cities. Others are being added regularly.

To place the progress indicated by these data in perspective, it should be remembered that this beginning period called for development of plans to conduct the expansion in each State, training Extension workers who would supervise the aides, and recruiting and training the aides themselves.

To further indicate perspective, these additional funds more than doubled the amount of funds previously allocated for direct educational programs in food and nutrition. With them, more than half of all funds allocated at the Federal level for Extension home economics work now goes for food and nutrition education.

The expansion has enthusiastic support at the Federal level, and funding prospects indicate an even more successful program for next year. The Bureau of the Budget has approved and forwarded to Congress the Department request to fund the expansion at the level of \$30 million.

The expansion of the food and nutrition program presents the most challenging opportunity the Cooperative Extension Service has faced in recent years. It promises an impact that defies evaluation at this point. At the outset, however, as indicated by the reports of the 39 States, we have reason to be more than optimistic about the overall results.—WJW